Forest and Wildlife Benefits on Private Land

Old Growth Forests and Wildlife

Hikers, bird-watchers, hunters, and anyone else who enjoys Missouri forests can easily recognize an old growth forest by four characteristics:

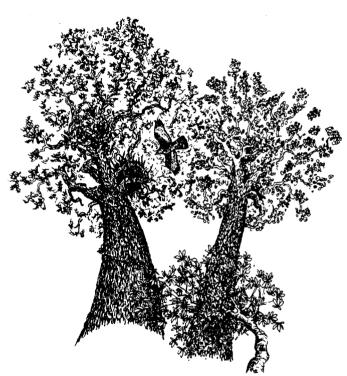
- 1. large, live old trees, with dead branches, hollow trunks, or cavities,
- 2. large snags (dead standing trees),
- 3. large logs on the ground, and
- 4. several different heights of trees and shrubs.

Old growth conditions may take up to 100 years to develop, depending on the soil and trees in the area. About 270 different kinds of wildlife will use old growth habitat conditions.

Large cavity trees provide habitat for 35 wildlife species: 24 birds, 10 mammals, and 1 reptile. Some wildlife, such as the barred owl, pileated woodpecker and raccoon, require large trees with cavities high above the forest floor. Others, such as the redshouldered hawk, need the tree's large limbs in which to build their nests.



Old growth forests typically contain both dead and overmature trees, plus other trees and shrubs at a variety of heights.



Large raptors, such as the red-shouldered hawk, need large trees in which to build their nests.

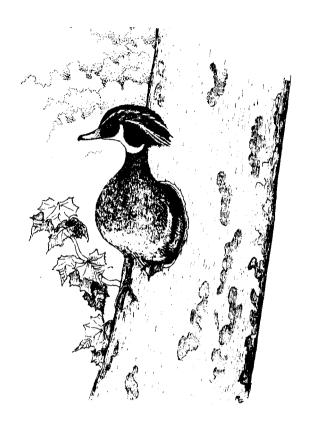
When these large trees die, they become snags which supply the needs of about 29 different birds. Woodpeckers use them for sounding boards when claiming their territory. Other birds use them for feeding, singing and surveillance.

When snags fall to the forest floor, they join yet another niche in nature. Sixty-six different kinds of wild-life, including birds, reptiles, amphibians and small mammals, find an abundance of insects, grubs and other invertebrates in the fallen trees. The logs are also used as hibernation sites, escape cover, runways, grouse drumming sites and observation stations.

Providing old growth habitat requires some careful planning. Managing for old growth means favoring wildlife that need these features, as opposed to favoring animals such as deer, quail, bobcats, rabbits and many songbirds that make their homes in young forests.

When managing for old growth, keep four basic qualities in mind:

- 1. When selecting an old growth stand, select stands over 50 years old, or young stands with 40 percent of the trees larger than 14 inches dbh (diameter at breast height). If a selected stand is less than 50 years old, thinning the stand could speed the development of old growth conditions.
- Size is also critical. At least 15 acres not less than 200 feet wide in any area are required. Smaller stands are acceptable, but should be combined with other stands to meet the minimum size.



Old growth forests along streams provide ideal wood duck habitat.



Mature forests nurture some of the more unusual plants, such as the lady-slipper orchid.

3. The variety of trees can also affect the quality of old growth candidates. Some kinds of trees reach maturity quicker than others. White oak members are most desirable because they can live up to 200 years or more. Black and scarlet oaks are also good, since they reach maturity at 80-90 years of age and can provide dens earlier. A combination of black and white oaks is ideal.

Old growth not only provides wildlife habitat, it also provides ecological stability, solitude and beauty. For assistance with managing old growth, contact the Missouri Department of Conservation office near you.

